

## ABSTRACT

A luminescent vest equipped with plastic optical fibers having structural layers including a top layer of plastic film, a middle layer of plastic optical fibers and a bottom layer of a web-like structure. The middle woven layer has the  
5 following woven structure: (1) interwoven by lengthwise plastic optical fibers and crosswise plastic optical fibers; (2) interwoven by crosswise chemical fibers and lengthwise plastic optical fibers; (3) interwoven by lengthwise chemical fibers and crosswise plastic optical fibers. The three-layer structure is distributed at appropriate positions on the vest, while the top part of plastic film layer is  
10 arranged with letters or patterns serving to project light from the plastic optical fibers, and connected to electrical power to project alarm light effects. The present invention can be used in applications that include a traffic policeman's uniform, an environmental protection worker's uniform, a security guard's uniform and ordinary apparel.

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